Docket No.: JCLA6879

REMARKS

**Present Status of the Application** 

Final Office Action mailed April 08, 2005, and Advisory Action mailed August 04, 2005,

have been fully considered. The Actions rejected all presently-pending claims 1-6 and 8-16.

Specifically, the Office Actions rejected claims 8-13 and 15-16 under 35 U.S.C. 103(a), as being

unpatentable over Fan (US 6,665,736, hereinafter "Fan"), in view of Taguchi (US 6,480,030,

hereinafter "Taguchi"). The Office Actions also rejected claims 1-6 under 35 U.S.C. 103(a) as

being unpatentable over Fan and Taguchi, and further in view of Takagi (US 6356096,

hereinafter "Takagi"). After entry of the foregoing amendments, claims 1-6 and 8-16 remain

pending in the present application, and reconsideration of those claims is respectfully requested.

These amendments are specifically described hereinafter. It is believed that the foregoing

amendments add no new matter to the present application.

Discussion of Rejections on claims 8-13 and 15-16 under 35 USC 103(a)

The Office Actions rejected claims 8-13 and 15-16 under 35 U.S.C. 103(a), as being

unpatentable over Fan, in view of Taguchi.

The combination of Fan with Taguchi is submitted to be improper because modification

of Fan's teachings by Taguchi will render Fan unsatisfactory for its intended purpose. First, in

Fig. 3A and col. 2 lines 35-42 of Fan, it is clear that termination resistor RT and the voltage VTT

have to be applied to the connection of the motherboard for making the north bridge and DDR

Page 6 of 11

Docket No.: JCLA6879

DIMM reach the logic ranges, operate more stably and diminish power consumption. Accordingly, in Fan's Fig. 3A, the termination resistor RT should be always connected to the voltage VTT and the DDR DIMM slot, which means, the connection between the termination resistor RT and the voltage VTT cannot be cut off. So, if combined with Taguchi's switch to cut off the connection between the termination resistor RT and the voltage VTT o Fan's Fig. 3A, then the whole system of Fan's Fig. 3A will not operate properly and stably, which means the combination will make Fan's Fig. 3A unsatisfactory with its intend use. However, in Claim 8 of the application, the connection between the termination resistor and the voltage source will be selectively cut off when the motherboard enters in power saving mode or when the memory module is not inserted in the slot. So, the combination of Fan with Taguchi is not proper and won't make claim 8 obvious.

Secondly, in Fan's Figs. 5A~9B, the termination resistors RT are built inside the dummy card; and the dummy card is selectively coupled to the SDR DIMM slot or DDR DIMM slot to make Fan's motherboard for supporting various types of memory modules. It is clear that, the termination resistors RT in Fan's Figs. 5A~9B has to be selectively coupled to the slot, which means Fan's motherboard cannot achieve its intended use of supporting several types of memory modules if the termination resistors RT in Fan are always coupled to the slot. But in claim 8, the termination resistors are always, not selectively, coupled to the slot. So, if combined with Taguchi's switch to cut off the connection between the termination resistor RT and the voltage VTT, then the whole system of Fan's Fig. 5A~9B will not support several types of memory module, which means the combination will make Fan unsatisfactory with its intend use. As

Docket No.: JCLA6879

discussed above, because the proposed modification would render Fan unsatisfactory for its intended use, then there is no suggestion or motivation to make the proposed modification. So, the combination of Fan with Taguchi is improper and will not make claim 8 obvious. The rejection should be withdrawn.

Because independent claim 8 is allowable over the prior art of record, its dependent claims 9-12 are allowable as a matter of law, for at least the reason that these dependent claims contain all features/elements of their respective independent claim 8.

As for another independent claim 13, similarly, because the modification of Fan's teachings by Taguchi would render Fan unsatisfactory for its intended use, there is no suggestion or motivation to make the modification. More specifically, the connection between the memory module and the voltage source/termination resistor cannot be cut off in the combination of Fan with Taguchi, but in claim 13 of the application, a control signal is used to cut off the connection between the memory module and the voltage source/termination resistor. Therefore, the rejection should be withdrawn and Claim 13 is in condition for allowance.

Because independent claim 13 is allowable over the prior art of record, its dependent claims 14-16 are allowable as a matter of law, for at least the reason that these dependent claims contain all features/elements of their respective independent claim 13.

### Discussion of rejections on claims 1-6 under 35 USC 103(a)

Similarly, the combination of Fan with Taguchi is submitted to be improper and modification of Fan's teachings by Taguchi will not render claim 1 obvious. First, in Fig. 3A and

Page 8 of 11

Docket No.: JCLA6879

col. 2 lines 35-42 of Fan, it is clear that the voltage VTT has to be connected to the memory module slot for making the north bridge and DDR DIMM reach the logic ranges, operate more stably and diminish power consumption. Accordingly, in Fan's Fig. 3A, the voltage VTT should be always connected to and the DDR DIMM slot, or said, the connection between the DDR DIMM slot and the voltage VTT cannot be cut off. So, if combined with Taguchi's switch to cut off the connection between the DDR DIMM slot and the voltage VTT, then the whole system of Fan's Fig. 3A will not operate properly and stably, which means the combination will make Fan's Fig. 3A unsatisfactory with its intend use. However, in Claim 1 of the application, the connection between the slot and the voltage source will be selectively cut off when the motherboard enters in power saving mode or when the memory module is not inserted in the slot. So, the combination of Fan with Taguchi is not proper and won't make claim 1 obvious.

Secondly, it is clear that Taguchi teach a switch to cut off the connection between the termination resistor and the voltage source, not a switch to cuff off the connection between the termination resistor and the slot. But, in claim 1 of the application, the switches cut off the coupling between the slot and the termination resistors under control of the control signal. Therefore, the combination of Fan with Taguchi would not get a switch which is capable of cutting off the coupling between the slot and the termination resistors in the claim 1 of the application. So, the combination of Fan with Taguchi is improper and will not make claim 1 obvious. The rejection should be withdrawn.

Consequently, the combination of these references does not render claim 1 obvious, and the rejection should be withdrawn.

Page 9 of 11

Docket No.: JCLA6879

Because independent claim 1 is allowable over the prior art of record, its dependent claims 2-6 are allowable as a matter of law, for at least the reason that these dependent claims contain all features/elements of their respective independent claim 1.

Prior Art Made of Record

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

Docket No.: JCLA6879

#### **CONCLUSION**

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated., and that the now pending claims 1-6 and 8-16 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney.

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Respectfully submitted, J.C. PATENTS

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